THE WATER SPOT

BITS OF INFORMATION FROM THE HAWAI'I SAFE DRINKING WATER BRANCH

Volume 3, Issue 6 October/November 1999 Phone: (808) 586-4258

AMENDED CHAPTER 11-20, RULES RELATED TO POTABLE WATER SYSTEMS

Governor Benjamin Cayetano signed the final, approved rules, Chapter 11-20, Rules Related to Potable Water Systems, on August 23, 1999. The amended rules took effect on September 7, 1999. Briefly, these rules require new community and new nontransient noncommunity water systems to demonstrate capacity prior to commencing operations; update the new source and new or substantially modified system plan approval processes; require the use of ANSI/NSF Standard 60 certified drinking water chemicals; and incorporate federal requirements for consumer confidence reports.

A copy of the amended rules will be mailed to all public water systems in the State. However, due to cost constraints additional copies of the rules may be obtained may be obtained at a cost of \$6.25 for official size (125 pages) or \$3.15 for the reduced size (63 pages). Your request should be made to the Safe Drinking Water Branch at (808) 586-4258 or call toll-free from the neighbor islands by calling 974-4000, ext. 64258 from Hawaii, 274-3141, ext. 64258 from Kauai, 984-2400, ext. 64258 from Maui, or 1-800-468-4644, ext. 64258 from Molokai or Lanai. The amended rules will also be made available on the SDWB web site at http://www.hawaii.gov/health/eh/sdwb

CONSUMER CONFIDENCE REPORTS: "Purveyors Must Deliver Reports to Customers by October 19th"

We are rapidly approaching the October 19, 1999 deadline for public water systems to delivering the first consumer confidence reports to its customers. As of the printing of this newsletter, draft or final CCRs have been reviewed by the SDWB for **99** public water systems or **80** percent of the water systems required to prepare and deliver consumer confidence reports.

In addition to delivering the report to its consumers, public water systems must submit a copy of the report to the Safe Drinking Water Branch. A certification letter must also be submitted by the public water systems to the Safe Drinking Water Branch to certify that the water system has prepared the reports in accordance with the report content requirements and that the reports were delivered to its customers. The certification letter must be received by the Safe Drinking Water Branch within 3 months of the October 19 deadline for delivery of the reports or January 19, 2000.

Beginning next year and each year thereafter, the annual CCR deadline will be July 1.

If you have any questions regarding the consumer confidence report rule requirements, please contact the Safe Drinking Water Branch at (808) 586-4258 or call toll-free from the neighbor islands by calling 974-4000, ext. 64258 from Hawaii, 274-3141, ext. 64258 from Kauai, 984-2400, ext. 64258 from Maui, or 1-800-468-4644, ext. 64258 from Molokai or Lanai

1999 GROUNDWATER CONTAMINATION MAPS NOW AVAILABLE

The Safe Drinking Water Branch has completed the revisions to its Groundwater Contamination Maps. These maps dated May 1999 are current revisions of the Groundwater Contamination Maps and depict contaminants detected in the State's groundwater resources. Copies of the groundwater contamination maps may be obtained by contacting the Safe Drinking Water Branch at (808) 586-4258. Copies can also be obtained through the Safe Drinking Water Branch web site at: http://www.hawaii.gov/health/eh/sdwb

SDWB TO PROPOSE ALLOWING THE USE OF E. COLI TESTING FOR MEETING BACTERIOLOGICAL MONITORING COMPLIANCE REQUIREMENTS

In recent weeks we have been hearing about people becoming ill from E. coli infections possibly from contact with contaminated drinking water. Near Albany, New York, there was a reported 804 suspected or confirmed cases of E. coli infection resulting for an outbreak at a county fair resulting in at least two deaths. It was reported that nearly all these individuals were alleged to have consumed water from products made with water piped from a contaminated well. The well is believed to have become contaminated from animal feces, though the specifics of this contamination is still being investigated. In Petersburg, Illinois more than 300 people were reported to be infected with E. coli after attending a concert and cookout in a cow pasture. While the source of the outbreak has not yet been determined, possible suspects include beef served at the event, from someone serving food at the event, or the water. In Battle Ground Lake, Washington the lake is reportedly the prime suspect in an apparent E. coli outbreak. This outbreak primarily affected children. Of the 30 cases, 24 were reported to have swam in Battle Ground Lake. Lakes, rivers, and streams are potential surface water sources for drinking water supplies.

The Total Coliform Rule (TCR) requires that public water systems regularly monitor for total coliform bacteria contamination. Control of total coliforms should ensure the control of all E. coli strains. The Surface Water Treatment Rule (SWTR) requires systems using surface water as their drinking water source to kill bacterial contaminants though the use of disinfectants.

At the present time, Hawaii's Drinking Water Regulations require the monitoring of total coliform and fecal coliform, but not the monitoring of E. coli. The Safe Drinking Water Branch and the State Laboratories Division are currently considering revisions to Chapter 20 that will allow the inclusion of E. coli testing under the BACTI (TCR) monitoring requirements. The rationale for making this change include: (1) E. coli is a better public health indicator than fecal coliform; (2) E. coli is becoming the national indicator/standard for bacteriological analysis in drinking water; (3) fecal coliform analysis may yield possible false positive results; and (4) currently approved analytical methods for E. coli and now reliable and yield results in less time than the conventional coliform methods.

If such a change is made, the Safe Drinking Water Branch and the State Laboratories Division will be required to do the following: (1) prepare the rationale, justification, and support documents for making an administrative rule change; (2) submit rule revisions to the Attorney General's Office for review and possibly conduct public hearings on the revisions; (3) laboratory will have to change test methods for analyzing E. coli; and (4) evaluate laboratory certification requirements for laboratories that will use the E. coli test methods.

In the process of evaluating the proposed change, the Safe Drinking Water Branch and the State Laboratories Division held several meetings with the major water departments' drinking water laboratories and other interested parties. A meeting was also held with the EPA Region IX microbiological laboratory certification officer Andy Lincoff to discuss the use of E. coli and laboratory certification requirements for E. coli testing. Samples of the Colilert and Colisure reagent have been provided to laboratories to allow them the opportunity to use and evaluate the test methods. In April 1999, presentations were made by Dr. Marty Allen of the AWWA Research Foundation on "Public Health Significance of Bacterial Indicators in Drinking Water" in which Dr. Allen raised the issue of coliform monitoring regulations being outdated and the inherent problems with the MF method for coliform analysis (less sensitive than liquid methods, media ingredients may inhibit growth, membrane may be defective, and possible heterotrophic bacteria interference). The other presentation was made by Mr. Scott King of IDEXX (the maker of Colilert and Colisure) on how to run these test methods and provided information on the reliability of the methods.

Using the information and concerns identified at the abovementioned meetings and additional information obtained from other State Drinking Water Programs that use E. coli testing, the Safe Drinking Water Branch will make a determination on how to incorporate E. coli testing under the BACTI (TCR) monitoring requirements. Once the proposed revisions are drafted, the Safe Drinking Water Branch will hold an informational meeting to allow water purveyors and other stakeholders the opportunity to review and comment on these revisions.

LECTURE AND WORKSHOP ON NEW CRYPTOSPORIDIUM AND GIARDIA TEST METHOD

Cryptosporidium and Giardia has gained notoriety in the United States due to the recent outbreaks involving municipal water systems. The detection and removal of these organisms from water supplies is of great concern to both water purveyors and public health officials. On Tuesday, November 2, 1999 from 8:00 am to 9:00 am at the State Laboratories Facility Auditorium in Pearl City, there will be a lecture on Cryptosporidium and Giardia in Water. Dr. Stephanie Harris and Ms. Stephanie Bailey of the U.S. Environmental Protection Agency Region X will discuss the epidemiology of the diseases caused by these protozoan parasites, treatment options and detection methods currently available including the newly approved EPA Method 1623 which utilizes filtration, immunomagnetic separation and fluorescent antibody labeling. The theory and development of the current detection methods will also be discussed. Dr. Harris and Ms. Bailey have extensive knowledge in the detection and identification of Cryptosporidium parvum and Giardia lamblia. They have participated in the national round robin validation studies of EPA Method 1622 and 1623. This lecture is open to anyone interested in learn about Cryptosporidium and Giardia.

Following the lecture there will be a workshop on EPA Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA on November 2-3, 1999 (Session 1) and November 4-5, 1999 (Session 2) at the State Laboratories Facility, 2725 Waimano Home Road, Pearl City. This two-day "hands-on" training course will cover the newly approved Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA. The workshop is designed to familiarize laboratory personnel with the theories and technologies necessary to understand and implement this new method. Participants will process actual samples from collection to analysis. This course is being provided free of charge; however, seating is limited. For more information or to register for this workshop, contact Kristine Kang, Environmental Microbiology Section at (808) 453-6601.

IMPORTANT: Live organisms will be used in this course. All participants are required to provide their own lab coats and safety glasses for personal protection. Gloves will be provided.

This lecture and workshop is being sponsored by the State Laboratories Division, Hawaii Department of Health.

AWWA TO CONDUCT SATELLITE TELECONFERENCE ON NEW DISINFECTANTS/ DISINFECTION BY-PRODUCTS AND INTERIM ENHANCED SURFACE WATER TREATMENT RULES

In December 1998, the USEPA promulgated Stage 1 of the Disinfectants/Disinfection By-Products Rule (D/DBPR) and the Interim Enhanced Surface Water Treatment Rule (IESWTR). These two rules are the beginning of a series of rules that will pose extremely challenging and potentially expensive operational issues for water utilities. Water treatment and distribution operations staff must understand what these rules will mean for their utility now, because the many changes in treatment and distribution practices required will take months, if not years, to implement completely.

On November 9, 1999, the American Water Works Association (AWWA) will conduct a live presentation via satellite on these new rules. At this satellite teleconference you will find out the impacts of these new rules on your water system, potential issues involved in compliance with these rules, how to comply with these rules without violating other rules, and tools and techniques available to water utility operators for compliance with these rules.

The satellite teleconference will be held at the Department of Health Laboratory at 2725 Waimano Home Road in Pearl City. The conference will be from 7:00 - 10:30 a.m. There may also be downlinks to the outside islands. A fee of \$40 (payable to "AWWA Hawaii Section") will be charged for this teleconference.

For more information or to register for the teleconference, contact Mark Yonamine at (808) 586-4258 or toll-free from the neighbor islands by calling 974-4000, ext. 64258 from Hawaii, 274-3141, ext. 64258 from Kauai, 984-2400, ext. 64258 from Maui, or 1-800-468-4644, ext. 64258 from Molokai or Lanai.

Water System Utility Management Workshop

SAVE THESE DATES!

REGISTER EARLY — SPACE IS LIMITED!

October 14 - 15, 1999	Hilo - Department of Health Environmental Health Facility
October 18 - 19, 1999	Kona – Natural Energy Laboratory of Hawaii Authority, Keahole Point
October 21 - 22, 1999	Oahu – Sand Island Wastewater Facility, Honolulu
November 18 - 19, 1999	Maui – Department of Health, Wailuku
November 22 - 23, 1999	Kauai - County Department of Water, Lihue
November 29 - 30, 1999	Oahu - Department of Health Laboratory, Pearl City

Water System owners, managers and supervisors are invited to attend a two-day workshop on Utility Management. Participants will learn the principles involved in managing a water utility and individual knowledge and skills will be enhanced by interactive participation. Upon successful completion of this 16-hour course, participants will receive a certificate of completion.

Workshop topics will include:

zThe Functions of a Manager z Safety Programs

z Employment Policies & Procedures

z Financial Management **z**Staffing

zOperations & Maintenance

z Public Relations



This event is sponsored by the Hawaii Department of Health with funding from the U.S. Environmental Protection Agency. The workshops are presented by Rural Community Assistance Corporation and Pural Water Specialty.

For registration information, please contact:

Rural Community Assistance Corporation (RCAC) 234 Waianuenue Ave., Suite 218 Hilo, HI 96720

Visit RCAC's web site at www.rcac.org

Phone: 808/934-8987 Fax: 808/969-7727

E-mail: gjohanse@rcac.org

Registration Form for Water System Utility Management Workshop Please indicate your first and second preferences

Oct. 14 - 15 Hilo Oct. 18 - 19 Kona	Oct. 21 - 22 Nov. 22 - 23	Oahu Kauai	Nov. 1 Nov. 2	8 - 19 Maui 9 - 30 Oahu	
NAME		TODA	Y'S DATE		
TITLE	ORGANIZATION/COMPANY				
ADDRESS					
CITY/STATE/ZIP			SLAND		
I AM REPRESENTING				WATER SYSTEM	
WORK PHONE		FAX			
E-MAIL ADDRESS					

There is no fee to attend. Workshop course book and materials will be provided. Meals are not included. You will be notified upon acceptance of registration.

WATER DISTRIBUTION SYSTEM OPERATOR TRAINING TO BEGIN IN 2000

Beginning early next year, the Rural Community Assistance Corporation (RCAC) will be conducting statewide, basic water distribution system operator classes sponsored by the Department of Health with funding by the U.S. Environmental Protection Agency. The classes will be offered at no charge but space will be limited. There will be approximately 18 sessions, each limited to about 40 public water system operators. It is anticipated that each session will consist of 5 days of instruction (total of 36 hours), conducted over a two week period. The sessions will closely follow the "Water Distribution System Operation and Maintenance" and "Small Water System Operation and Maintenance" field study training program textbooks by the California State University, Sacramento (Kenneth Kerri) which will be provided to each participant.

If the Distribution Operator Certification stakeholders group agrees to the commonly used operator classifications based on the number of people served, we would also anticipate offering a standard certification examination (100 test questions) provided by the Association of Boards of Certification (ABC) and administered by the Safe Drinking Water Branch at the end of each session. While there are no rules in effect at this time, the state Board of Certification has indicated their willingness to recognize or "grandfather" those class participants who attend the full 36 hours of instruction, successfully pass the exam with a score of 70 percent or higher, and have adequate, qualifying work experience. Please note that by 2001, or sooner, there will be new rules in effect for the certification of distribution system operators with additional opportunities to take the certification exam administered by the Board of Certification.

Please look for more details in future issues of the Water Spot.

PREPARING FOR THE CERTIFICATION EXAMINATION

Since the opportunity to pass a certification exam may be available early next year, we would like to encourage distribution system operators to begin their preparations now. One of the best ways is to read and study reference books and to take practice exams like those found in the AWWA's Operator Certification Study Guide (approximately \$25 through AWWA). Books like the AWWA study guide will familiarize you with the kinds of questions asked (most were taken from ABC) and help identify areas where you need to study more.

When taking a practice exam, try to take it under the same type of conditions that the actual exam would be given under. Eliminate any distractions and time yourself to see if you are able to average less than two minutes per question. Also, when using a calculator for practice problems and the actual exam, use one that you are quite familiar with. It is not advisable to borrow one just before the exam and have to learn how to use it during the exam. The time saved can be used to complete the exam and perhaps revisit exam questions or problems that need reviewing.

Whatever method of study or preparation you may choose, it is important not to wait until taking the classes to prepare yourself for the exam.

WE NEED YOUR PHOTOGRAPHS!!!

While "The Water Spot" newsletter provides a lot of useful information to those in the drinking water industry and other newsletter readers, suggestions have been made by several readers to improve the newsletter by including more photographs and pictures. So to improve "The Water Spot" we will be including more photographs and pictures in the future. You can help by sending us interesting photographs of your water system or of staff doing work related to providing safe drinking water to its consumers. Please send your interesting photographs to "The Water Spot", Safe Drinking Water Branch, 919 Ala Moana Blvd., Room 308, Honolulu, HI 96814.

SDWB HOLDS WORKSHOP ON OPERATOR CERTIFICATION

On September 30, 1999, the Safe Drinking Water Branch held a workshop on operator certification. At this workshop:

Barry Pollock, Project Officer, Drinking Water Office, EPA, Region IX discussed the key administrative issues on EPA's operator certification guidelines.

The SDWB conducted a review and discussion of the joint county water departments' letter dated August 23, 1999, responding to proposed Department of Health (legally, the certification board's) rules and the DOH's administrative position on the certification of operators for all public water systems. There were nineteen issues that were raised by the county water departments.

Ann Takushi Zane, Vice Chairperson of the certification board, discussed the time line needed for adoption of a revised Chapter 11-25 to meet EPA's operator certification deadlines.

Royce Fukunaga, Chairperson of the certification board, conducted a general review of Chapter 11-25 noting the areas where revisions are needed and what effort is needed by the stakeholders and the Board to meet EPA's deadlines.

LEAD & COPPER ANALYSES STILL AVAILABLE FOR HOMES ON RAIN CATCHMENT SYSTEMS

The program to subsidize the testing of lead and copper in individual homes served by rain catchment systems is still available. This program, which was added to Act 218 of the 1997 Legislature by Senator Andrew Levin, allows an owner or user of a "legal dwelling" to submit a sample of water from their rain catchment system to the Department of Health's contract laboratory for analyses of lead and copper in the water. The owners may submit one water sample and must pay for the shipping (approximately \$4) and \$25 of the analyses cost. The State will be billed for the remaining cost of the analyses.

The local contact point for the analyses is Brewer Environmental Industries who can provide sampling and mailing materials, and information about the program. Brewer will also collect the \$25 fee when homeowners pick up the sampling and shipping materials. Their contact information is as follows; Brewer Environmental Industries, 60 Kuhio Street, Hilo, HI 96720, Phone: (808) 933-7800.

Samples should be mailed to Brookside Laboratories, Inc., the laboratory contracted by the Department of Health to carry out the analyses. Contact and mailing information for Brookside is as follows: Brookside Laboratories, Inc., Environmental and Industrial Division, 308 South Main Street, New Knoxville, Ohio, Phone: (419) 7532448

SDWB WELCOMES NEW MEMBERS TO ITS STAFF

The Safe Drinking Water Branch welcomes two new members to its staff.

Denise Dang, an engineer, has joined the Engineering Section in the newly created DWSRF engineer position and will be working on the technical aspects of the DWSRF Program, as well as other Engineering Section activities. Denise previously worked as an engineer with the Wastewater Branch.

Roland Thompson, a planner, has joined the Groundwater Pollution Control Section, as the Groundwater Planner, replacing Russell Kumabe (who has moved to the Land Use Commission). Roland will be working on the Groundwater Protection Program, Hawaii Source Water Assessment Program, and other planning activities.

CAPACITY DEVELOPMENT UPDATE

The federal regulations on technical, managerial and financial capacity for public water systems were incorporated into Title 11, Chapter 20 of the Hawaii Administrative Rules, <u>Rules Relating To Potable Water Systems</u>, In addition, our capacity development plan for new water systems, New Community and New Nontransient Noncommunity Water System Start-Up Requirements has been approved by EPA. Now all new community and new nontransient noncommunity water systems must demonstrate technical, managerial and financial capacity prior to construction and use.

Our capacity development plans (plan for new systems and plan for existing systems) were developed with the assistance of a stakeholder group and input from water systems throughout the state. Since our meetings, we made changes to simplify our plans, added an interim approval process and added a few attributes to be consistent with the new Administrative Rules.

The following changes were made:

- (1) Combined the three enclosures of each plan into a single enclosure.
- (2) Incorporated an interim capacity evaluation process using a minimum number of capacity attributes to the new system plan. The interim approval process will enable a prospective new water system to obtain approval to use a new raw water source, and/or approval to start construction. The new water system must still demonstrate technical, managerial and financial capacity before approval to start-up the system is granted.
- (3) Added a few more attributes for consistency between our plans and the new Administrative Rules.

Mahalo to the stakeholder group and the staff of water systems who helped us develop the plans. The SDWB is really appreciative of your efforts. Again, a big MAHALO.

We will be mailing copies of the plan for new water systems to interested parties during October and November of this year.

The plan for existing water systems is with the EPA Region IX, and will be made available at a later date.

CONTACTING THE SAFE DRINKING WATER BRANCH

TELEPHONE NUMBERS

	Telephone Number	FAX Number	Toll-free Number to reach Honolulu Office
HONOLULU:	586-4258	586-4370	
KAUAI:	241-3323	241-3566	274-3141, ext. 64258
MAUI:	984-8234	984-8222	984-2400, ext. 64258
WEST HAWAII:	322-7011	324-0028	974-4000, ext. 64258
EAST HAWAII:	933-0401	933-0400	974-4000, ext. 64258
MOLOKAI/LANAI	[:		1-800-468-4644, ext. 64258

The Water Spot is published by the Safe Drinking Water Branch, Environmental Management Division of the Hawai`i State Department of Health and is distributed to water purveyors, water system operators, staff, consultants, and other interested parties.

> The Water Spot may also be viewed on the Safe Drinking Water Branch's web site at: http://www.hawaii.gov/health/eh/sdwb

Please send your

THE WATER SPOT NEWSLETTER OR

Fax us at (808) 586-4370, Attn: "THE WATER SPOT"

suggestions, ideas, questions or comments to:

Safe Drinking Water Branch State Department of Health 919 Ala Moana Blvd., Room 308 Honolulu, Hawaii 96814

SDWB WEB SITE:

http://www.hawaii.gov/health/eh/sdwb

HISWAP WEB SITE:

http://www.aloha.net/~will/hiswap.html



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GARY GILL Deputy Director for Environmental Health

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